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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/681,391	03/28/2001	Stephen A. Byrne	85VF-00003	3266

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EXAMINER

BORISSOV, IGOR N

ART UNIT	PAPER NUMBER
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3639

DATE MAILED: 03/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/681,391	BYRNE ET AL.	
	Examiner	Art Unit	
	Igor Borissov	3639	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 and 13-43 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 and 13-43 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Response to Amendment

Amendment received on 12/19/2005 is acknowledged and entered. Claims 10-12, 44 and 45 have been canceled. Claims 1, 4, 6, 7, 13, 16, 17, 19, 23, 25-27, 29, 33, 36-40 and 42 have been amended. Claims 1-9 and 13-43 are currently pending in the application.

Specification

The abstract of the disclosure is objected to because the abstract does not correspond to the claimed invention. Specifically, the abstract describes a method and system for billing a customer for equipment usage, while Claims recite a method and system for fault monitoring of a customer equipment. Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-9 and 13-43 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The Claims are confusing, because there is no interrelationship between the independent claims preambles and the body of the claims. The preambles of the independent Claims 1, 13, 19, 23, 29, 36 and 40 recite a method, system or computer-readable medium for "performing usage-based billing for a business entity", while the recites method steps or structural elements fail to accomplish the result or indicate functionality of actually billing a business entity.

Furthermore, while the preamble of the Claim 19 appears to recite an apparatus (database), the body of the Claim fails to indicate any one structural element.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 40 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

In determining whether the claimed subject matter is statutory under 35 U.S.C. 101, a practical application test should be conducted to determine whether a “useful, concrete and tangible result” is accomplished. See *AT&T Corp. v. Excel Communications, Inc.*, 172 F.3d 1352, 1359-60, 50 USPQ2d 1447, 1452-53 (Fed. Cir. 1999); *State Street Bank & Trust Co. v. Signature Financial Group, Inc.*, 149 F.3d 1368, 1373, 47 USPQ2d 1596, 1600 (Fed. Cir. 1998).

An invention, which is eligible or patenting under 35 U.S.C. 101, is in the “useful arts” when it is a machine, manufacture, process or composition of matter, which produces a concrete, tangible, and useful result. The fundamental test for patent eligibility is thus to determine whether the claimed invention produces a “use, concrete and tangible result”. The test for practical application as applied by the examiner involves the determination of the following factors”

(a) “Useful” – The Supreme Court in *Diamond v. Diehr* requires that the examiner look at the claimed invention as a whole and compare any asserted utility with the claimed invention to determine whether the asserted utility is accomplished. Applying utility case law the examiner will note that:

- i. the utility need not be expressly recited in the claims, rather it may be inferred.
- ii. if the utility is not asserted in the written description, then it must be well established.

(b) “Tangible” – Applying *In re Warmerdam*, 33 F.3d 1354, 31 USPQ2d 1754 (Fed. Cir. 1994), the examiner will determine whether there is simply a mathematical construct claimed, such as a disembodied data structure and method of making it. If so, the claim involves no more than a manipulation of an abstract idea and therefore, is nonstatutory under 35 U.S.C. 101. In *Warmerdam* the abstract idea of a data structure became capable of producing a useful result when it was fixed in a tangible medium, which enabled its functionality to be realized.

(c) “Concrete” – Another consideration is whether the invention produces a “concrete” result. Usually, this question arises when a result cannot be assured. An appropriate rejection under 35 U.S.C. 101 should be accompanied by a lack of enablement rejection, because the invention cannot operate as intended without undue experimentation.

The Claim as a whole, as currently recited, appear to be directed to nothing more than a series of steps including generating and manipulating data without any useful, concrete and

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tangible result and are therefore deemed to be non-statutory. While said data may indicate concrete and/or tangible results, there does not appear to be any useful result.

The invention is implemented on a computer; therefore, the invention is directed to the technological arts. However, the claimed invention does not require physical acts to be performed outside the computer independent of and following the steps to be performed by a programmed computer, where those acts involve the manipulation of tangible physical objects and result in the object having a different physical attribute or structure. See *Diamond v. Diehr*, 450 US at 187, 209 USPQ at 8. The steps of computer processing data representing applying validation rules do not impose independent limitations on the scope of the claim beyond those required by the mathematical operation and abstract limitations because said manipulated data is not actual measured values of physical phenomena. *In re Galnovatch*, 595 F.2d at 41 n.7, 201 USPQ at 145 n.7; *In re Sarker*, 588 F.2d at 1331, 200 USPQ at 135. The steps of “applying validation rules” and “identifying the data records” have no direct effect on the physical world outside the computer. Thus, the claimed invention merely inputs data into the system and performs a mathematical algorithm without any limitation to a practical application as a result of the algorithm or outcome and is therefore deemed to be non-statutory.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-5, 8, 9, 13-15, 18-25, 28-31, 34-36 are 39-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mayle et al. (US 6,182,022) in view of Coons et al. (US 6,832,250).

Mayle et al. (Mayle) teaches a method and system for remote equipment monitoring, comprising:

Independent Claims

Claims 1, 13, 23, 29, 23, 29 and 36.

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inputting into the remote computer system meter data relating to equipment, the meter data including values read from various system components (C. 3, L. 34-53);

generating an export file by processing the meter data at the remote computer system, the export file including a plurality of data records (C. 3, L. 34-53);

applying validation rules to the export file at the local computer system to determine the data records included within the export file that satisfy the validation rules (C. 4, L. 9-21);

generating an error report identifying the data records included within the export file that violate at least one of the validation rules including identifying data records that violate at least one of the validation rules due to at least one of a processing error at the local computer system and an inputting error at the remote computer system (C. 8, L. 32-55).

Mayle does not specifically teach that said meter data includes usage data. Also, Mayle does not specifically teach that said application of the validation rules is executed at the local computer system.

Coons et al. (Coons) teaches a method and system for remotely monitoring office equipment, said method including receiving data related to equipment usage at the remote location, processing said data, and generating a report regarding received data (C. 3, L. 10-16; C. 4, L. 15-20; C. 9, L. 10-20).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Mayle to include that said meter data includes usage data, as disclosed in Coons, because it would advantageously allow to remotely store aggregated usage data associated with monitored assets of an enterprise, as specifically stated in Coons.

As per executing software routine at the local computer system rather than at the remote location, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Mayle and Coons to include said feature, since it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70.

Claims 40.

Mayle teaches:

inputting into the remote computer system meter data relating to equipment, the meter data including values read from various system components (C. 3, L. 34-53);

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generating an export file by processing the meter data at the remote computer system, the export file including a plurality of data records (C. 3, L. 34-53);

applying validation rules to the export file at the local computer system to determine the data records included within the export file that satisfy the validation rules (C. 4, L. 9-21);

Mayle does not specifically teach that said meter data includes usage data. Also, Mayle does not specifically teach that said application of the validation rules is executed at the local computer system.

Coons et al. (Coons) teaches a method and system for remotely monitoring office equipment, said method including receiving data related to equipment usage at the remote location, processing said data, and generating a report regarding received data (C. 3, L. 10-16; C. 4, L. 15-20; C. 9, L. 10-20).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Mayle to include that said meter data includes usage data, as disclosed in Coons, because it would advantageously allow to remotely store aggregated usage data associated with monitored assets of an enterprise, as specifically stated in Coons.

As per executing software routine at the local computer system rather than at the remote location, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Mayle and Coons to include said feature, since it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70.

Dependent Claims

Claim 2. Said method wherein the meter data is received in a predefined format (Mayle; C. 3, L. 51-52).

Claims 3, 14, 18, 22, 28, 30, 34 and 39. Said method wherein said meter data includes information regarding invoicing (Coons; C. 8, L. 49-57).

Claim 4. Said method wherein the meter data is inputted into the remote computer system via the Internet (C. 3, L. 56-57).

Claims 5, 15, 20, 24 and 31. Said method wherein the validation rules comprise comparing a metric extracted component attribute value with previously calculated current normal thresholds for each attribute, and determining if any metrics are outside their attribute's normal limits (C. 4, L. 1-5).

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Claims 8, 21 and 25. Said method and system, wherein the error report is accessible via a web site and notifying a dealer that corrections are awaiting input (Coons; C. 8, L. 61-64; C. 9, L. 17-20).

(original) A method according to Claim 8 wherein the error report lists rejected data records, an explanation of the reason the record was rejected, and the file name and date the record was sent.

Claim 9. See reasoning applied to Claim 8. The specific content of the report cannot change said method step, therefore is given no patentable weight. Non-functional descriptive material cannot render non-obvious an invention that would otherwise have been obvious. See: *In re Gulack* 703 F.2d 1381, 1385, 217 USPQ 401, 404 (Fed. Cir. 1983) *In re Dembiczak* 175 F.3d 994, 1000, 50 USPQ2d 1614, 1618 (Fed. Cir. 1999). The specific example of non-functional descriptive material is provided in MPEP 2106, Section VI: (example 3) a process that differs from the prior art only with respect to non-functional descriptive material that cannot alter how the process steps are to be performed.

Claim 35. See reasoning applied to Claim 34. The specific content of the file is not a structural element of the system, therefore is given no patentable weight. MPEP 2106 (II) (C) states: "Language that suggests or makes optional but does not require steps to be performed or does not limit a claim to a particular structure does not limit the scope of a claim or claim limitation."

Claim 41. Said method, comprising the step of generating a meter correction report identifying the data that violates a validation rule (Mayle; C. 8, L. 32-55).

Claims 6, 7, 16, 17, 26, 27, 32, 33, 37, 38, 42 and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mayle et al. in view of Coons et al. and further in view of Bossen (US 3,582,878).

Dependent Claims

Claims 6, 7, 16, 17, 26, 27, 32, 33, 37, 38 and 42. Mayle in view of Coons teaches all the limitations of the Claims 6, 7, 16, 17, 26, 27, 32, 33, 37, 38 and 42, except specifically teaching automatically correcting at the local computer the data records identified as processing errors.

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Bossen teaches a method and system for errors correction in a data messaged, including automatically correcting errors introduced into the data during data processing (C. 2, L. 19-22).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Mayle and Coons to include automatically correcting at the local computer the data records identified as processing errors, as disclosed in Bossen, because it would advantageously allow to enhance the accuracy of the system, thereby minimize potential financial losses.

Claim 43. See reasoning applied to Claim 40.

Response to Arguments

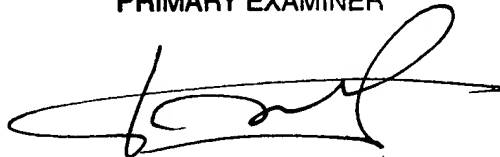
Applicant's arguments with respect to Claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Igor Borissov whose telephone number is 571-272-6801. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John W. Hayes can be reached on 571-272-6708. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

IGOR N. BORISSOV
PRIMARY EXAMINER



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